



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,197	04/10/2001	Thomas C. Welch	440379	9956
23548	7590	04/13/2004	EXAMINER	
LEYDIG VOIT & MAYER, LTD 700 THIRTEENTH ST. NW SUITE 300 WASHINGTON, DC 20005-3960			CHIESA, RICHARD L	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 04/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/720,197

Applicant(s)

WELCH ET AL.

Examiner

Richard L. Chiesa

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2003 and 15 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-10 and 12-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10 and 12-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on July 3, 2003 has been entered.

Drawings

2. The drawings filed on July 3, 2003 are acceptable to the examiner.

Suspension

3. In light of the fact that the period of suspension requested by applicants on July 3, 2003 and August 15, 2003 expired several months ago, prosecution of the application now resumes with an action on the merits below.

Claim Rejections - 35 USC § 102/103

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1724

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicants are advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 8 is rejected under 35 U.S.C. 102(b) as being anticipated by Kadoya et al. Note Figures 1 and 6 of Kadoya et al.

8. Claims 3-5, 7, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Pall. Note Figures 1, 3-5, 7, and 8 of Pall.

9. Claims 1, 2, 9, 10, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakayama et al. Note reference numerals 130, 132, 136, Figures 1-3 of Nakayama et al.

10. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakayama et al in view of Lippold. Nakayama et al, as described above in paragraph 9, disclose a filter substantially as claimed. It would appear that Nakayama et al may not explicitly state that the filter is multi-layered or fluoropolymeric. In any case, Lippold teaches the well-known use of a multi-layered fluoropolymeric construction in a pleated filter for the purpose of attaining optimum rigidity (note col. 3, lines 3-68, and Figure 3). Consequently, it would have been readily obvious to one having ordinary skill in the art to employ a multi-layered fluoropolymeric construction in the Nakayama et al pleated filter in order to ensure proper rigidity as taught by Lippold.

Response to Arguments

11. Applicants' arguments filed on July 3, 2003 have been fully considered but they are not persuasive for the reasons explained below.

In the first place, Nakayama et al's Figure 2 reveals a filter wherein a thickness of a pleat tip region at a point spaced about one to four pleat leg thicknesses from the end of the pleat tip region is less than or equal to about twice the pleat leg thickness. The pleat leg thickness in Nakayama et al's Figure 2 is 7 mm and a point 7 mm from the end of the pleat tip region reveals a pleat tip region thickness of 14 mm which is twice the pleat leg thickness. Therefore, applicants' assertion in the first paragraph of the *REMARKS* section that Nakayama et al's Figure 2 is merely an idealized conception and provides no basis for determining dimensions is

Art Unit: 1724

unfounded. It is only reasonable to assume that Nakayama et al's Figure 2 is actual size and thus shows the claimed size relationships. See *In re Jureit*, 161 USPQ 731.

Secondly, contrary to applicants' comments in the second paragraph of the *REMARKS* section, Pall clearly shows in Figures 1, 3-5, 7, and 8 reformed pleat tip regions. In fact, Pall even shows dies 15 and 35 in Figures 4 and 8 respectively that appear to be virtually identical to the dies 54 and 55 shown in applicants' Figures 5-7.

Finally, relative to applicants' statements in the third paragraph of the *REMARKS* section, there appears to be little doubt upon inspection of Kadoya et al's Figures 1 and 6 that Kadoya et al disclose a method of producing a filter having pleats free of bulbous tip regions. Certainly, Kadoya et al do not show the bulbous tip regions defined by applicants as reference characters 11(a) and 11(b) in applicants' Figures 1 and 2(a) admitted prior art filters.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard L. Chiesa whose telephone number is (571) 272-1154.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine R. Copenheaver, can be reached at (571) 272-1156.

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1700 receptionist whose telephone number is (571) 272-0987.

Facsimile correspondence must be transmitted through (703) 872-9306.

Richard L. Chiesa
April 6, 2004

Richard L. Chiesa

**RICHARD L. CHIESA
PRIMARY EXAMINER
ART UNIT 1724**

April 6, 2004